COMBAT DEVELOPMENTS NEWSLETTER

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In This Issue:

Publication of TRADOC PAM 71-9

TRADOC Pam 71-9 has been revised and is in final Chief of Staff TRADOC approval processing. The final draft has been posted on the TRADOC DCSCD home page at: www.tradoc.army.mil/dcscd/references.htm. The Pam is expected to be approved and available on the TRADOC home page by 29 Oct 99.

The Pam will not be published in hard copy.

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Highlights of what's new in TRADOC Pam 71-9

- Chapter 2 New Method of Doing Business: An Overview. Overview of Joint Vision and joint concepts has been added to show their relationship to Army Vision and Army concepts in the requirements determination process.

- Chapter 4 Integrated Concept Teams. Organizational and Simulation Support Plan added to ICT products.

- Chapter 5 Developing and Managing the Capstone and Subordinate Concepts
  - Concepts are divided into two categories, the Capstone Concept, which is TRADOC Pamphlet 525-5, and Subordinate Concepts. Subordinate Concepts are either Integrating Concepts or Supporting Concepts.
  - The term "Warfighting" was deleted as a reference to all 525 series concepts.

- The descriptive term "Concepts of Operations" referring to all other warfighting concepts other than the Capstone Concept, TP 525-5, was replaced with "Subordinate concepts".

- Chapter 6 and Annex D Future Operational Capabilities
  - Changes were made to reflect command guidance to align Army FOCs with the AUTL, thereby establishing a viable linkage to the UJTL and DOCs produced in the Joint community.
  - Corporate FOCs addressing desired capabilities that apply across-the-force as a whole and their development process are added.

- Chapter 7 Science and Technology (S&T)
  - Reflects the work done on the Special Access Program (SAP) and how it is incorporated into the STO/ATD Review process.
  - Added changes in the STO/ATD Process that was approved by the ASTWG in Nov 98.

- Chapter 10 Documenting Warfighting DTLOMS Requirements
  - Doctrine requirements process is updated.
  - The scope of the Force Design Update (FDU) has been expanded to include personnel supportability analysis methodology; the determination of bill payer methodology; and, the integration of unpaid bills into a TRADOC 1-n priority list.

- Chapter 11 Warfighting Materiel Requirements
  - O&O description defined.
  - CD responsibilities for reprocurement defined.
  - Joint NBC and CB defense requirements determination process defined.

- Chapter 12 Models and Simulations
  - Encouraged maximum use of M&S standards with reference to the Army Standards Repository (ASTARS) at http://www.msrr.army.mil/astarst.
  - Updated Figure 12-1 with revised organization office names/symbols.
  - Defines TRADOC's roles and responsibilities in developing and maintaining Simulation Support Plans (SSPs).
  - Added requirements integration for Geospatial Information Systems (GIS) for M&S.

- Chapter 13 Special Considerations
  - Commercial transport considerations defined.
  - Software Change Cycle process defined.
  - Computer Network attack considerations added.

- Appendix V (NEW): Guidance for developing reliability failure definition and scoring procedure (FDSC). This new appendix provides a general (TRADOC) philosophy and generic guidelines for use in development and application of failure definition and scoring criteria for reliability applications in U.S. Army systems.

- Appendix W (NEW): Guidance for the Joint Service Integration Group Operational Requirement Document Process (NBC Requirements). Describes process by which the Army as executive agent for Chemical and Biological Defense coordinate and

integrate the Services' NBC defense requirements and review NBC training and doctrine initiatives.

Threshold and Objective Costs in ORDs

The 10 Aug 99 Chairman of the Joints Chief of Staff Instruction (CJCSI) 3170.01A, *Requirements Generation System,* requires that ORDs include threshold and objective costs.

Effective immediately, all ORDs that have not been approved, including those at headquarters awaiting approval, will conform with the following program affordability guidance:

- Cost will be included in paragraph 8 of the ORD per CJCSI 3170.01A to ensure proponents address affordability early in the program. These costs will be stated as threshold and objective costs in order to provide flexibility and allow for program evaluation and cost trade-off studies. The threshold costs represent the maximum cost. The objective cost reflects the level the materiel developer is trying to achieve.

- The type cost used will be tailored to the system being developed. Costs will normally be life-cycle costs over the development cycle. The life-cycle costs are all costs including RDT&E, procurement, Military Construction (MILCON), acquisition, Operations & Maintenance (O&M), and Operations & Support (O&S) as well as development costs associated with predecessor systems. For systems being developed using time-phased requirements in support of evolutionary acquisition, use those costs associated with fielding the capability of the particular phase. The type of costs and cost baseline used must be clearly identified in the ORD.

- Sources for the cost data are the Materiel Developer and Department of the Army representatives to the Combat Developer (proponent) led Integrated Concept Team.

Policy memorandum with the above interim guidance can be found on the CD Home Page.

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Other CJCSI 3170.01, *Requirements Generation System*, Changes

- For all MNS, CRD, and ORD that go to the JROC, an executive summary of the analysis supporting the development of the CRD/ORD and specific analysis used in CRD/ORD KPP determination will be provided with the draft document when submitted for approval.

- New requirement to coordinate all AIS MNSs and ORDs with J8 to determine JROC interest. Instruction details the process.

- Totally revised CRD preparation and format guidance. CRD initiation will be through JROC direction (joint CRD) or approval (service unique CRD). The JROC will designate the CRD lead for joint CRD and provide guidance for CRD development.8

will review proposals to develop component unique CRD and draft CRD for JROC interest and provide guidance to the component.

- Substantive update to ORD procedure and format guidance. Format for ORD in the Instruction is the format for all new/revised ORDs.
- Significant increased emphasis on defined linkage between CRDs and ORDs. If the ORD falls under a CRD mission area, the ORD sponsor must work closely with the CRD lead during ORD definition phase.
- Mandates Interoperability Key Performance Parameter (KPP) and detailed Information Exchange Requirements (IERs) for CRDs and ORDs.
- Refocuses CRD and ORD KPP to be a roll up of other CRD and ORD requirements. They are not merely selection of ORD performance parameters but are specially developed. They continue to be true "show stoppers" and are not limited to a single paragraph.
- Requires time-phased requirements in support of evolutionary acquisition. Time-phased requirements is an approach to consider requirements in an incremental manner over time, such that they match projected threat and technology to deliver systems to the field in increasing increments of capability.
- Requires program affordability (costs) be included in all ORDs, paragraph 8.
- Defines Joint Forces Command (formerly U.S. Atlantic Command) role for interoperability and experimentation. USCINCJFCOM will serve as the CJCS advocate for joint warfighting interoperability and will comment on adequacy of CRD and ACAT I/IA ORD interoperability KPP. USCINCJFCOM is also designated the Executive Agent for conducting joint warfighting experimentation.

Combat Developments Information System (CDIS)

CDIS is an information system that will assist the Combat Developments (CD) action officer in the creation, staffing, and approval of all CD unique documents; provide electronic publishing capability; help the CD action officer manage assigned systems; and provide a searchable repository of all CD unique documents. The proposed system is an adaptation of the Air Force Integrated Requirements Support System. Implementation will occur over time as funds become available.

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TRADOC Architecture Redesign

Development of Operational Architectures (OA) is a core function of each proponent. With the intent of maintaining decentralized OA work, a Process Action Team (PAT) is studying the details of developing a single architecture process. The PAT is addressing database consolidation, the architecture validation process, and regulation refinement. Key emphasis is on determining the feasibility of combining the C4RDP database and the OA Repository into a

single system. The PAT concluded that users' needs in a single architecture process can best be satisfied by a single integrating center. This resulted in a recommendation to combine architecture functions currently performed at Forts Leavenworth and Gordon. The recommendation could result in residual manpower savings.

Planning and implementation will continue through the remainder of 1999 and into the year 2000. General Officer Decision briefs are scheduled during the November–December 1999 timeframe. The end product should be cells of architects at each proponent who develop architecture products that are integrated at one center using the TRADOC Architecture Repository Management System (TARMS).

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Operational and Organizational (O&O) Plan for Materiel Systems

DCSCD published a memorandum implementing system level O&O concept-planning guidance in Feb 99. The CD community has responded accordingly but more emphasis is needed on developing concise and sound O&O concepts.

The O&O concept is summarized in the Mission Need Statements (MNSs), Capstone Requirement Documents (CRDs), Operational Requirements Documents (ORDs), and System Requirements Reviews (SRRs). These summaries document the system's Army XXI connection to an approved TRADOC concept and establish its contribution, employment, and impact. Requirements documents that do not clearly show the link to Army XXI are being challenged with reqard to need and are finding it difficult to gain approval or support.

A sound O&O concept will aid in the development of rationale for KPPs and their associated threshold values.

O&O concepts guidance and an example of a good O&O are included in the revised TRADOC Pam 71-9 (Appendix I, Guidance and Appendix R, Example) which will be released by 29 Oct 99.

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Key Performance Parameters Reminder

KPPs are to be designated in all ORDs with an asterisk in front of the subparagraph number in paragraph 4.

- KPPs are true "show stoppers."
- A system's KPPs MUST truly affect it's warfighting function; that is, if it's not achieved, the system doesn't contribute to the fight.

- An ORD will have the absolute minimum number of performance parameters designated as KPPs.

Rationale MUST clearly lay out why a KPP is essential to the system AND CLEARLY answer the question of "so what": what are the operational consequences of not meeting the threshold value.

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U.S. Army Operational Test and Evaluation Command (OPTEC) Redesignated as U.S. Army Test and Evaluation Command (ATEC)

On Nov. 18, 1998, the Vice Chief of Staff of the Army directed and approved consolidation of Army developmental and operational testing into a single test and evaluation command. That decision led to the redesignation of the Operational Test and Evaluation Command (OPTEC) to the U.S. Army Test and Evaluation Command (ATEC).

Hosted by ATEC Commander Maj. Gen. A.J. Madora, redesignation ceremonies were conducted Oct. 1, 1999, at Fort Myer, Va., with Assistant Vice Chief of Staff of the Army Lt. Gen. David K. Heebner serving as reviewing officer.

The Test and Evaluation Command (TECOM) transferred from the Army Materiel Command (AMC) and became an ATEC subordinate command. As part of the reorganization, TECOM was redesignated as the U.S. Army Developmental Test Command (DTC), with DTC headquarters remaining at Aberdeen Proving Ground, Md.

The Test and Experimentation Command (TEXCOM), already a subordinate command of ATEC, was redesignated the U.S. Army Operational Test Command (OTC) and stood up in place with headquarters at Fort Hood, Texas.

The Operational Evaluation Command (OEC) and Evaluation Analysis Center (EAC), with respective headquarters in Alexandria, Va., and Aberdeen Proving Ground, consolidated, reorganized, and redesignated as the Army Evaluation Center (AEC).

Under the consolidation directive, ATEC received responsibility for installation management of White Sands Missile Range (WSMR), N.M.; Dugway Proving Ground (DPG), Utah; and Yuma Proving Ground (YPG), Ariz.

ATEC also took command of Aberdeen Test Center (ATC) at Aberdeen Proving Ground, MD; Redstone Technical Test Center (RTTC), at Redstone Arsenal, Ala.; Aviation Technical Test Center (ATTC) at Fort Rucker, Ala.; Electronic Proving Ground (EPG), Fort Huachuca, Ariz.; Cold Regions Test Center (CRTC), Fort Greely, Alaska; and the Tropic Regions Test Center (TRTC), headquartered at YPG.

ATEC headquarters will remain in Alexandria, Va.

Test and Evaluation Coordination Offices (TECO's) are subordinate to the appropriate functional OTC Test Directorate and remain co-located at the supported TRADOC Battle Lab and School. The former TECO offices at Forts Monroe and Leavenworth have been renamed as ATEC Liaison Offices (LNO) and are subordinate to the ATEC DCSOPS. They also remain co-located at TRADOC and CAC HQs respectively.

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Combat Developments Training

Combat Developments (CD) Executive Course. The Army Force Management School at Fort Belvoir, Virginia, administers the four-week course. The course is mandatory for incoming and newly assigned DCSCD Directors, Directors of Combat Developments, Deputy Directors of Battle Laboratories, TRADOC System Managers and TRADOC Program Integration Officers. The next class is 27 Mar – 21 Apr 00. Students can be scheduled for the class by e-mailing the point of contact below.

CD Course. The two-week course is for Army officers (CPT to LTC), warrant officers, noncommissioned officers (SFC and above), and civilians (CS-11 to CS-14) recently assigned to, or enroute to, their initial assignment in a CD or materiel acquisition position. The course is taught by the Army Logistics Management College at Fort Lee, Virginia. A course schedule is provided below. See your training managers for instructions on how to apply.

Combat Developments Course (ALMC-CD)

Class Number	Start Date	End Date	Nominations Due	Location
00-002	6 DEC 99	17 DEC 99	22 OCT 99	ALMC, FT LEE, VA
00-003	20 MAR 00	31 MAR 00	4 FEB 00	ALMC, FT LEE, VA
00-004	19 JUN 00	30 JUN 00	5 MAY 00	ALMC, FT LEE, VA
00-702	18 JAN 00	28 JAN 00	3 DEC 99	FT HUACHUCA, AZ
00-703	17 APR 00	28 APR 00	3 MAR 00	FT LEONARD WOOD, MO

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Establishment of TRADOC System Manager (TSM) National Missile Defense (NMD)

CG TRADOC signed a charter effective 3 Aug 99 establishing TSM NMD. The TSM will perform as the Army's user representative and centralized manager and integrator for all DTLOMS products associated with the land-based NMD System. For the purpose of accomplishing this mission, the NMD TSM is assigned to, and resourced by, the Space and Missile Defense Command (SMDC). The NMD TSM will report to Commanding General, TRADOC, through the Commanding General, SMDC and Deputy Commanding General, TRADOC.

SMDC is the Army's specified proponent for NMD. By agreement between Commanding General, SMDC, and Commanding General, TRADOC, a single Army user representative is established for TRADOC and SMDC. The goal is to leverage TRADOC and SMDC force development resources and operate within the established Requirements Determination Process to effectively and efficiently represent Army user interests in the development of the land-based NMD system.

TSM NMD will integrate TRADOC proponent activities and functions related to the land-based NMD System. The TSM is authorized to coordinate directly with and task TRADOC activities when accomplishing the NMD System integration mission. Because of TSM NMD's unique command relationship, the TRADOC Deputy Chief of Staff for Combat Developments is designated to mediate differing positions between TRADOC proponent(s) and the NMD TSM.

The momentum of the NMD program has increased over the last two years due to increased concerns over the evolving ballistic missile threat. On 30 August 1999, the Joint Requirements Oversight Council (JROC) met and recommended the Army be designated as Lead Service and User Representative for the land-based NMD system.

The Army will chair an Executive Committee to resolve land-based NMD system-level operational requirements and issues associated with cost as an independent variable.

The TSM office is located at SMDC headquarters in Arlington, Virginia. COL Billings will serve as interim TSM until a board selected colonel is appointed. COL Billings can be reached at DSN 332-1322.

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